PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

on Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/646,994				
Filing Date	August 21, 2003				
First Named Inventor	Heinz Willebrand et al.				
Art Unit	2638				
Examiner Name	Phan, Hanh				
Attomas Dankat Number	04500 (7000)				

Sheet 1 of 5 Attorney Docket Number 81598 (7293)

				DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (Finners)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
HP	AA	^{US-} 6,529,556	03-04-2003	Perdue et al.	
HP	AB	^{US-} 5,896,211	04-20-1999	Watanabe	
HP	AC	^{US-} 6,009,115	12-28-1999	Но	
Hl	AD	^{US-} 5,347,525	09-13-1994	Faris	
HP	AE	^{US-} 2001/0053011 A1	12-20-2001	Imajo	
HP	AF	^{US-} 5,600,471	02-04-1997	Hirohashi et al.	
HP	AG	^{US-} 6,788,666 B1	09-07-2004	Linebarger et al.	
HP	AH	US- 5,978,117	11-02-1999	Koonen	
HP	Al	^{US-} 5,880,865	03-09-1999	Lu et al.	
Hl	AJ	^{US-} 5,457,561	10-10-1995	Taneya et al.	
HI	AK	^{US-} 5,016,242	05-14-1991	Tang	
Hl	AL	^{US-} 4,726,011	02-16-1988	lh et al.	
HP	AM	^{US-} 6,583,908	06-24-2003	Nakamura	
HI	AN	US- 5,999,295	12-07-1999	Vowell	
Ш	AO	us- 2002/0097468	07-25-2002	Mecherle et al.	
Н	AP	^{US-} 6,509,991	01-21-2003	Shibuya	
HP	AQ	^{US-} 6,889,009	05-03-2005	Willebrand	
Нθ	AR	^{US-} 6,239,888 B1	05-29-2001	Willebrand	
HP	CG	^{US-} 4,599,745	07-08-1986	Baran et al.	

		FORE	IGN PATENT DOCU	IMENTS		
	Cite No.	Foreign Patent Oocument	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁸ (# known)	MM-DD-YYYY		Or Relevant Figures Appear	T⁵
H	AS	EP 0 835 035 A1	04-08-1998	Alcatel Alsthom		
Hl	AT	EP 0 876 020 A1	11-04-1998	Alcatel Alsthom		
H	AU	EP 0 887 965 A1	12-30-1998	Alcatel Alsthom		
130	AV	EP 0 993 124 A2	04-12-2000	Matsushita Electric Industrial		
Al	AW	JP 2000-147306	05-26-2000	Kokusai Electric		~
HP	AX	JP 2000-315983	11-14-2000	Hirohashi		V

Examiner	Van Dahan	Date	11/20/
Signature	Manhy	Considered	11/10/05

*EXAMINER: Initial if reference considered, whether or not/citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Tradernark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449/PTO **Application Number** 10/646,994 August 21, 2003 Filing Date INFORMATION DISCLOSURE First Named Inventor Heinz Willebrand et al. STATEMENT BY APPLICANT Art Unit 2638 (Use as many sheets as necessary) **Examiner Name** Phan, Hanh Attorney Docket Number 81598 (7293) Sheet

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials* N	Cite No.1	Number-Kind Code ² (Fixnown)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		US-			
	l	US-			
		US-			
W. 1.2		US-			
		US-	1		

		FORE	IGN PATENT DOCL	IMENTS		
	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁸ (# known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
HP	AY	JP 2001-103545	04-13-2001	Sato		
HP	AZ	WO 00/29886	05-25-2000	California Institute of Technology		
HP	BA	WO 01/26263 A2	04-12-2001	Kestrel Solutions, Inc.		L
HP	ВВ	WO 01/86982 A1	11-15-2001	NTT Docomo, Inc	,"	
HP	вс	WO 01/35551 A1	05-17-2001	Buddatec Co., Ltd.		
H	BD	EP 1 250 018 A1	10-16-2002	NTT Docomo, Inc		

Examiner	~ 1.01	Date	11/10/1
Signature	(arlphan	Considered	1910/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Nind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitut	le for form 1449/PTC	`	•	Complete if Known		
00030101	10 101 101111 1443/7 1 0	-		Application Number	10/646,994	
INFO	DRMATIO	N DIS	CLOSURE	Filing Date	August 21, 2003	
STA	STATEMENT BY APPLICANT			First Named Inventor	Heinz Willebrand et al.	
				Art Unit	2638	
	(Use as many sheets as necessary)			Examiner Name	Phan, Hanh	
Sheet	3	of	5	Attorney Docket Number	81598 (7293)	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
HP	BE	Cai, M., et al., "5-Gbit's BER Performance on an All Fiber-Optic Add/Drop Device Based on a Taper Resonator-Taper Structure, "IEEE Photonics Technology Letters, Vol. 12, No. 9, pp.1177-9 (September 2000.)	
Hſ	BF	Cai, M., et al., "Observation of Critical Coupling in a Fiber Taper to a Silica-Microsphare Whispering-Gallery Mode System," Physical Review Letters, Vol. 85, No. 1, pp. 74-7 (July 3, 2000).	
H	BG	Cai, M., et al., "Fiber-coupled microsphere laser," Optics Letters, Vol. 25, No. 19, pp. 1430-1432 (October 1, 2000).	
H	вн	Cai, M., et at., "Fiber-Optic Add-Drop Device Based on a Silica Microsphere-Whispering Gallery Mode System," IEEE Photonics Technology Letters, Vol. 11, No. 6, pp. 686-7 (June 1999).	
HP	BI	Coppin, P. and T.G. Hodgkinson, "Novel Optical Frequency Comb Synthesis Using Optical Feedback," Electronics Letters, Vol. 26, No. 1, pp. 28-30 (January 4, 1990).	
H	ВЈ	Kitayama, K., "Highly-Stabilized Millimeter-Wave Generation by Using Fiber-Optic Frequency-Tunable Comb Generator," Journal of Lightwave Technology, Vol. 15, No. 5, pp. 883-93 (May 1997).	
H	вк	Kitayama, K., "Highly-Stabilized, Tunable Millimeter-wave Generation by Using Fiber-optic Frequency Comb Generator," Microwave Photonics, pp. 13-16 (1996).	
H	BL	Logan, Jr., R.T., "All-Optical Heterodyne RF Signal Generation Using a Mode-Locked-Laser Frequency Comb: Theory and Experiments," IEEE International Microwave Symposium Digest, Paper #TH4C-2, 4 pages (June 15, 2000).	
HP	вм	Maleki, L., "Technical Support Package on Whispering-Gallery-Mode Microspheres as Light Modulators," Nasa Tech Brief, Vol. 24, No. 11, 10 pages (November 2000).	
HP	BN	Novak, D., "Signal Generation Using Pulsed Semiconductor Lasers for Application in Millimeter-Wave Wireless Links," IEEE Transactions on Microwave Theory and Techniques, Vol. 43, No. 9, Part 2, pp. 2257-2262 (September 1995).	

Examiner	Walder and	Date	11.01.0
Signature	Oilykan.	Considered	11/10/23

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English tanguage Translation is attached. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

			of 1995, no persons a		PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031 at and Trademark Office; U.S. DEPARTMENT OF COMMERCE of Information unless it contains a valid OMB control number. Complete if Known
Substitut	e for form 1449/PT	0		Application Number	10/646,994
INFO	DRMATIO	N DIS	CLOSURE	Filing Date	August 21, 2003
STA	TEMENT	BY Al	PPLICANT	First Named Inventor	Heinz Willebrand et al.
	//top on			Art Unit	2638
	(Use as many s	SNOOTS 85 NO	scessary)	Examiner Name	Phan, Hanh
Sheet	4	of	5	Attorney Docket Number	81598 (7293)

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
HP	во	Otheru, S. and Noboru Takachio, "Methodology of Unequally Spaced Frequency Allocation for WDM Transmission Systems Using Typical Dispersion Shifted Fiver Cable," IEICE Trans. Commun., Vol. E83-8, No. 6, pp. 1290-7 (June 2000).	
HP	BP	JDS Uniphase, Product Information for FBG1500-ADM Series - Fiber Bragg Circulated Fixed Add/Drop Modules and WDi515 A1/D1-100GHz Spaced ITU Channel Add/Drop WDM Couplers, 2 pages, http://www.jdsunph.com/HTML/catalog/prod.	
HP	BQ	Giganet Corp., Product Information for EtherAir 1500TM - 2x100Base-TX over OC-3/STM-1, 6 pages http://www.giganet-corp.com/1500100/html.	
HP	BR	Sicom Incorporated, Product Information for DVB Satellite Modulator Products, 1 page, http://www.sicom.com/sicom/products/html.	
H	BS	Sicom Incorporated, Product Information for SM7060 Programmable Digital Modulator ASIC and MC2470 Modulator Circuit Card, 6 pages.	
HP	вт	Gould Fiber Optics, Product Information for Wavelength Division Multiplexers, 5 pages.	
Hſ	вυ	Ceragon Networks, Product Information for FiveAir 3100 and FibeAir 6200, 4 pages.	
HI	BV	ISC IASERsPEED Solutions, Product Information for SkyNetTM 500 Series -Quick Connectivity for 100 Mbps Fast Ethernet, 2 pages.	
HP	BW	Mohsen Kavehrad, A Coutermeasure to Improve Outage Performance of Interference-Limited Microwave Radio Links; January 1991, Canadian Electrical & Computer Engineering Journal, Vol. 16, No. 1, pp 13-18.	
H	вх	Clark, Gerald et al., "Hybrid free space optical/microwave communication networks: a unique solution for ultra high speed local loop connectivity", LightPointe Communications, Inc., pp 46-54, November 2000.	

Examiner	2600	Date	ulialas
Signature	Manlyhan	Considered	11/10/03

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application from to the USPTO. Time will very depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO				Complete if Known		
Substitute to term 14401 16				Application Number	10/646,994	
INFORMATION DISCLOSURE				Filing Date	August 21, 2003	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Heinz Willebrand et al.	
	// too oo			Art Unit	2638	
(Use as many sheets as necessary)				Examiner Name	Phan, Hanh	
Sheet	5	of	5	Attorney Docket Number	81598 (7293)	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number(s), publisher, city and/or country where published.		Τ²	
H	BY	LIGHTPOINTE COMMUNICATIONS INC., "LMDS Versus Free Space Optical Networks", www.lightpointe.com, Doc. No. 610-006514-H0001, February 21, 2001, pages I-III and 1-15 (18 pages).	
HP	BZ	R.A. MULLEN et al., "Wireless Optics Protection of Fiber via SONET Ring Closure", www.lightpointe.com, pp 1-10.	
HP	CA	CHINESE PATENT OFFICE, "The First Office Action", dated September 17, 2004, for corresponding application no. 00819317.7, with a copy of pending claims, 17 pages.	~
HP	СВ	AUSTRALIAN PATENT OFFICE, "Examiner's Report No. 2 on patent application no. 2001252868", dated February 25, 2005, for corresponding application no. 2001252868, with copy of pending claims, 11 pages.	
HP	CD	EUROPEAN PATENT OFFICE, "European Search Report", dated November 4, 2004, for EP application no. 03019647.1-2415, with copy of searched claims, 5 pages.	
H	CE	INDIAN PATENT OFFICE, "First Examination Report", dated June 27, 2005, for corresponding IN application no. IN/PCT/2002/01247/CHE, 2 pages.	
MP	CF	CHINESE PATENT OFFICE, "Notice on Grant of Patent Right for Invention", dated July 22, 2005, for corresponding application no. 00819317.7, 4 pages.	v
+			

Examiner		Date	
LAGITITIO	() Combon	Daic	1//16/25
Cianatura	1 get pet	Compident	20/00/05
Signature :		Considered	/ '
O.g. lata.c	· /	COMBIGOROG	

^{*}EXAMINER: Initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Commissioner of the complete this form with next communication to applicants to place a check mark here if English language Translation is attached. This collection of Information is required by 37 CFR 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, US. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: